Application No. 10/536,634
Examiner Chameli Das

Atty. Docket No. 6570P058
TC/A.U. 2192

AMENDMENTS TO THE CLAIMS

1-27. (canceled)

28.   (Currently amended) A computer system comprising:

a source file repository storing a plurality of active source files ~~belonging to~~ of a component, the active source files having been activated upon transfer to the source file repository; ~~and~~

a further source file repository from which the active source files were transferred, the further source file repository storing a plurality of inactive source files of the component and not yet activated; and

a central compilation service communicatively coupled with the source file repository that, upon receiving an activation request for at least one inactive source file of the component, compiles the component using the at least one inactive source file and, in case the compilation is successfully completed, activates the at least one inactive source file, including initiates a transfer of the at least one inactive source file to the plurality of active source files.

29.   (Previously Presented)   The computer system of claim 28, wherein the transfer comprises adding the at least one inactive source file to the plurality of active source files if the inactive source file has no corresponding active source file.

Application No. 10/536,634
Examiner Chameli Das

Atty. Docket No. 6570P058
TC/A.U. 2192

30. (Previously Presented) The computer system of claim 28, wherein the transfer of the at least one inactive source file is in response to replacing at least one corresponding active source file with the at least one inactive source file in case the corresponding active source file is outdated.

31. (Previously Presented) The computer system of claim 28, wherein the transfer comprises replacing at least one corresponding active source file with the at least one inactive source file if the active source file is outdated.

32. (Previously Presented) The computer system of claim 28, further comprising a runtime archive storage to store a compilation result of the component in case the compilation of the component is successfully completed.

33. (Canceled).

34. (Previously Presented) The computer system of claim 28, wherein the central compilation service notifies a changer of the inactive source file in case the compilation of the component fails.

35. (Previously Presented) The computer system of claim 28, wherein the central compilation service assigns a component status to the component depending on the result of the compilation, the component status being ready in case the compilation of the component is successfully completed.

Application No. 10/536,634
Examiner Chameli Das

Atty. Docket No. 6570P058
TC/A.U. 2192

36.   (Previously Presented)   The computer system of claim 28, wherein the

central compilation service assigns a component status to the component depending on

the result of the compilation, the component status being broken in case the compilation

of the component fails.

37.   (Previously Presented)   The computer system of claim 28, wherein the

central compilation service assigns a component status of dirty to a further component

that depends on the component in case the compilation of the component is successfully

completed.

38.   (Previously Presented)   The computer system of claim 28, wherein the

central compilation service performs an incremental build when compiling the

component if the component has a dependency on a further component, the incremental

build using a component dependency evaluator to determine the dependency and to

provide a previously obtained compilation result of the further component, and to provide

the at least one inactive source file and the plurality of active source files of the

component.

39.   (Previously Presented)   The computer system of claim 28, wherein the

central compilation service performs a parallel build when compiling the component by

evaluating dependencies of the component on further components and compiling the

component and at least one of the further components in parallel based on the

dependencies.

40.   (Previously Presented)   The computer system of claim 39, wherein the

parallel build is performed by a cluster of build computers.

41.   (Currently amended) An article of manufacture comprising instructions that

when loaded into a memory of a computer system and executed by at least one processor

of the computer system, cause the at least one processor to:

        receive an activation request for at least one inactive source file of the component,

the inactive source file having been modified and subject to being activated;

        compile the component using the at least one inactive source file and a plurality of

active source files, the active source files having been previously activated; and

        activate the at least one inactive source file, including initiate a transfer of the at

least one inactive source file to [[a]] the plurality of active source files, in case the

compilation is successfully completed.

42.   (Previously Presented)   The article of claim 41 further comprising

instructions that, when loaded into the memory of the computer system and executed by

the at least one processor of the computer system, cause the at least on processor to notify

a changer of the inactive source file, in case the compilation fails.

Application No. 10/536,634
Examiner Chameli Das

Atty. Docket No. 6570P058
TC/A.U. 2192

43.   (Previously Presented)   The article of claim 41, wherein the instructions that cause the at least one processor to compile the component comprise instructions that, when loaded into the memory of the computer system and executed by the one or more processors cause the at least one processor to perform the compilation as an incremental build, the component having a dependency on a further component, the incremental build using a component dependency evaluator to determine the dependency and to provide a previously obtained compilation result of the further component, and to provide the at least one inactive source file and the plurality active source files of the component.

44.   (Previously Presented)   The article of claim 41, wherein the instructions that cause the at least one processor to compile the component comprise instructions that, when loaded into the memory of the computer system and executed by the one or more processors cause the at least one processor to perform the compilation as a parallel build by evaluating dependencies of the component on further components and compiling the component and at least one of the further components in parallel based on the dependencies.

45.   (Previously Presented)   The article of claim 44, wherein the parallel build is performed by a cluster of build computers.

46.   (Currently amended)   A source file activation method comprising:

Application No. 10/536,634
Examiner Chameli Das

Atty. Docket No. 6570P058
TC/A.U. 2192

receiving at a central compilation service an activation request for at least one

inactive source file of a component, the inactive source file having been modified and

subject to being activated;

compiling the component using the at least one inactive source file and a plurality

of active source files, the active source files having been previously activated; and

activating the at least one inactive source file, including initiating a transfer of the

at least one inactive source file to [[a]] the plurality of active source files, in case the

compilation is successfully completed.

47.   (Previously Presented)   The method of claim 46 further comprising

notifying a changer of the inactive source file, in case the compilation fails.

48.   (Previously Presented)   The method of claim 46, wherein the transfer of the

at least one inactive source file comprises adding the at least one inactive source file to

the plurality of active source files in case the plurality has no corresponding active source

file.

49.   (Previously Presented)   The method of claim 46, wherein the transfer of the

at least one inactive source file comprises replacing at least one corresponding active

source file with the at least one inactive source file in case the corresponding active

source file is outdated

Application No. 10/536,634
Examiner Chameli Das

Atty. Docket No. 6570P058
TC/A.U. 2192

50.   (Previously Presented)   The method of claim 46, further comprising storing a compilation result of the component in a runtime archive storage in case the compilation of the component is successfully completed.

51.   (Canceled)

52.   (Previously Presented)   The method of claim 46, further comprising: assigning a component status to the component depending on the result of the compilation, the component status being selected from the group of:

        ready in case the compilation of the component is successfully completed, and broken in case the compilation of the component fails; and

        assigning a component status of dirty to a further component in case the further component depends on the component and the compilation of the component is successfully completed.

53.   (Previously Presented)   The method of claim 46, wherein the compilation is performed as an incremental build, the component having a dependency on a further component, the incremental build using a component dependency evaluator to determine the dependency and to provide a previously obtained compilation result of the further component, and to provide the at least one inactive source file and the plurality active source files of the component.

54.   (Previously Presented)   The method of 46, wherein the compilation is

performed as a parallel build by evaluating dependencies of the component on further

components and compiling the component and at least one of the further components in

parallel based on the dependencies.

55.   (Currently amended)   A method for validating software comprising:

        retrieving a source file of a ~~component referencing~~ a referenced component from

a source file repository of a source control system with a local file system;

        obtaining a compilation result of the referenced component from a runtime

archive storage with the local file system;

        receiving a modification of the source file with an integrated development

environment;

        transferring the source file to a local build tool within the integrated development

environment upon having received the modification;

        retrieving the compilation result from the local file system with the local build

tool;

        locally compiling the component that includes the modified source file by using

the compilation result of the referenced component resulting in a new compilation result

of the component with the local build tool;

        storing the new compilation result in the local file system;

        checking in the modified source file into the source file repository, the modified

source file becoming an inactive source file of the source file repository;

Application No. 10/536,634
Examiner Chameli Das

Atty. Docket No. 6570P058
TC/A.U. 2192

launching an activation request with regards to the inactive source file directed to

a central compilation service; ~~and~~

loading the inactive source file and corresponding active source files of the

component from the source file repository with the central compilation service;

retrieving the compilation result of the referenced component from the runtime

archive storage;

centrally compiling the component with the central compilation service; and

triggering the activation of the successfully compiled inactive source file in the

source file repository in case of successful central compilation, including transferring the

inactive source file to the active source files of the component in the source file

repository.

56.   (Canceled)   .

57.   (Currently amended)   The method of claim [[56]] 55 further comprising the

integrated development environment deploying the new compilation result to a local

runtime for test purposes prior to the checking in step.

58.   (Currently amended)   The method of claim [[56]] 55 further comprising the

central compilation service making available the result of the central compilation in the

runtime archive storage.

59.   (Currently amended) The method of claim [[56]] 55 further comprising the

central compilation service storing an error result in case an error occurs during the

central compilation, and making available the error result to a changer of the inactive

source file causing the error.

60.   (Previously Presented)   A local development computer configured to

execute retrieving, obtaining, transferring, retrieving compilation result, locally

compiling, storing, deploying and launching of the method according to claim 55.